Exploring Aeronautics			
2002 Mathematics			
Content Standards			
New Mexico Mathematics			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	NM	MA.5.5.M.2.1	Solve measurement problems using appropriate tools involving length, perimeter, weight, capacity, time, and temperature.
Fundamentals of Aeronautics (145-176)	NM	MA.5.5.D.1.1	Construct, read, analyze, and interpret tables, charts, graphs, and data plots.
Fundamentals of Aeronautics (145-176)	NM	MA.5.5.D.1.3	Display, analyze, compare, and interpret different data sets, including data sets of different sizes.
Fundamentals of Aeronautics (145-176)	NM	MA.5.5.D.2.1	Organize and display single-variable data in appropriate graphs and representations and determine which types of graphs are appropriate for various data sets.
The Tools of Aeronautics	NM	MA.5.5.D.4.1	Determine probabilities through experiments and/or simulations and compare the results with mathematical expressions.
The Resource Center	NM	MA.5.5.A.3.2.a	the number line to model the relationship between rational numbers and rational number operations
Science of Flight	NM	MA.5.5.M.1.1	Understand properties (e.g., length, area, weight, volume) and select the appropriate type of unit for measuring each using both U.S. customary and metric systems.
Science of Flight	NM	MA.5.5.M.1.3	Solve problems involving linear measurement, weight, and capacity (e.g., measuring to the nearest sixteenth of an inch or nearest millimeter; using ounces, milliliters, or pounds and kilograms) to the appropriate degree of accuracy.
Science of Flight	NM	MA.5.5.M.2.1	Solve measurement problems using appropriate tools involving length, perimeter, weight, capacity, time, and temperature.
Science of Flight	NM	MA.5.5.D.1.6	Formulate questions and identify data to be collected to correctly answer a question.
Science of Flight	NM	MA.5.5.D.4.1	Determine probabilities through experiments and/or simulations and compare the results with mathematical expressions.
Integrating with Aeronautics	NM	MA.5.5.M.1.1	Understand properties (e.g., length, area, weight, volume) and select the appropriate type of unit for measuring each using both U.S. customary and metric systems.
Integrating with Aeronautics	NM	MA.5.5.M.2.1	Solve measurement problems using appropriate tools involving length, perimeter, weight, capacity, time, and temperature.
Intro to Aeronautics (109-123)	NM	MA.5.5.D.1.1	Construct, read, analyze, and interpret tables, charts, graphs, and data plots.

Intro to Aeronautics (109-123)	NM	MA.5.5.D.1.3	Display, analyze, compare, and interpret different data sets, including data sets of different sizes.
Scientific Method(124-144)	NM	MA.5.5.D.1.2	Construct, interpret, and analyze data from graphical representations and draw simple conclusions using bar graphs, line graphs, circle graphs, frequency tables, and Venn diagrams.
Scientific Method(124-144)	NM	MA.5.5.D.1.3	Display, analyze, compare, and interpret different data sets, including data sets of different sizes.
Exploring Aeronautics			
2002 Mathematics			
Content Standards			
New Mexico Mathematics			
Grade 6			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	NM	MA.6.6.M.2.3	Select and use strategies to estimate measurements including angle measure and capacity.
Fundamentals of Aeronautics (145-176)	NM	MA.6.6.D.1.5	Solve problems by collecting, organizing, displaying and interpreting data.
Fundamentals of Aeronautics (145-176)	NM	MA.6.6.D.3.2	Conduct observations, surveys, experiments and/or simulations, record the results in charts, tables, or graphs, and use the results to draw conclusions and make predictions.
Airplane Control(209-256)	NM	MA.6.6.M.2.3	Select and use strategies to estimate measurements including angle measure and capacity.
The Tools of Aeronautics	NM	MA.6.6.D.3.2	Conduct observations, surveys, experiments and/or simulations, record the results in charts, tables, or graphs, and use the results to draw conclusions and make predictions.
Science of Flight	NM	MA.6.6.M.2.1	Apply various measurement techniques and tools, units of measure, and degrees of accuracy to find accurate rational number representations for length, liquid, weight, perimeter, temperature, and time.
Science of Flight	NM	MA.6.6.D.1.5	Solve problems by collecting, organizing, displaying and interpreting data.
Science of Flight	NM	MA.6.6.D.1.11	Formulate and solve problems by collecting, organizing, displaying, and interpreting data.
Integrating with Aeronautics	NM	MA.6.6.M.2.4	Select and justify the selection of measurement tools, units of measure, and degrees of accuracy appropriate to the given situation.
Scientific Method(124-144)	NM	MA.6.6.D.1.1	Use statistical representations to analyze data.
Scientific Method(124-144)	NM	MA.6.6.D.1.5	Solve problems by collecting, organizing, displaying and interpreting data.
Scientific Method(124-144)	NM	MA.6.6.D.1.11	Formulate and solve problems by collecting, organizing, displaying, and interpreting data.

Scientific Method(124-144)	NM	MA.6.6.D.2.2	Describe the effects of missing or incorrect data.
Scientific Method(124-144)	NM	MA.6.6.D.3.2	Conduct observations, surveys, experiments and/or simulations, record the results in charts, tables, or graphs, and use the results to draw conclusions and make predictions.
Exploring Aeronautics			
2002 Mathematics			
Content Standards			
New Mexico Mathematics			
Grade 7			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	NM	MA.7.7.M.2.1	Apply strategies and formulas to find missing angle measurements in triangles and quadrilaterals.
Fundamentals of Aeronautics (145-176)	NM	MA.7.7.D.2.4	Use appropriate technology to gather and display data sets and identify the relationships that exist among variables within the data set.
Wings(177-208)	NM	MA.7.7.A.1.6	Solve problems involving rate, average speed, distance, and time.
Tools of Aeronautics(257-326)	NM	MA.7.7.A.3.1	Create scale models and use them for dimensional drawings.
Integrating with Aeronautics	NM	MA.7.7.N.3.2	Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.
Intro to Aeronautics (109-123)	NM	MA.7.7.D.1.1	Describe how data representations influences interpretation.
Scientific Method(124-144)	NM	MA.7.7.D.1.1	Describe how data representations influences interpretation.
Scientific Method(124-144)	NM	MA.7.7.D.1.2	Select and use appropriate representation for presenting collected data and justify the selection.
Scientific Method(124-144)	NM	MA.7.7.D.1.13	Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, identifying missing information, and selecting, collecting, and displaying appropriate data to address the problem.
Exploring Aeronautics			
2002 Mathematics			
Content Standards			
New Mexico Mathematics			
Grade 8			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	NM	MA.8.8.D.3.2	Describe how reader bias, measurement errors, and display distortion can affect the interpretation of data, predictions, and inferences based on data.
Fundamentals of Aeronautics (145-176)	NM	MA.8.8.D.3.3	Conduct simple experiments and/or simulations, record results in charts, tables, or graphs, and use the results to draw conclusions and make predictions.

Wings(177-208)	NM	MA.8.8.A.4.4	Solve multi-step problems that involve changes in rate, average speed, distance, and time.
Airplane Control(209-256)	NM	MA.8.8.A.4.4	Solve multi-step problems that involve changes in rate, average speed, distance, and time.
Tools of Aeronautics(257-326)	NM	MA.8.8.D.1.5	Simulate an event selecting and using different models.
The Tools of Aeronautics	NM	MA.8.8.D.1.5	Simulate an event selecting and using different models.
The Tools of Aeronautics	NM	MA.8.8.D.3.3	Conduct simple experiments and/or simulations, record results in charts, tables, or graphs, and use the results to draw conclusions and make predictions.
Science of Flight	NM	MA.8.8.D.1.5	Simulate an event selecting and using different models.
Science of Flight	NM	MA.8.8.D.2.2	Generate, organize, and interpret real number and other data in a variety of situations.
Integrating with Aeronautics	NM	MA.8.8.A.2.6	Formulate and solve problems involving simple linear relationships, find percents of a given number, variable situations, and unknown quantities.
Integrating with Aeronautics	NM	MA.8.8.G.1.1	Recognize, classify, and discuss properties of all geometric figures including point, line, and plane.
Intro to Aeronautics (109-123)	NM	MA.8.8.D.2.1	Use changes in scales, intervals, or categories to help support a particular interpretation of data.
Intro to Aeronautics (109-123)	NM	MA.8.8.D.2.4	Interpret and analyze data from graphical representations and draw simple conclusions (e.g., line of best fit).
Scientific Method(124-144)	NM	MA.8.8.D.1.2	Generate, organize, and interpret real numbers in a variety of situations.
Scientific Method(124-144)	NM	MA.8.8.D.1.6	Develop an appropriate strategy using a variety of data from surveys, samplings, estimations, and inferences to address a specific problem.
Scientific Method(124-144)	NM	MA.8.8.D.2.4	Interpret and analyze data from graphical representations and draw simple conclusions (e.g., line of best fit).
Scientific Method(124-144)	NM	MA.8.8.D.3.2	Describe how reader bias, measurement errors, and display distortion can affect the interpretation of data, predictions, and inferences based on data.
Scientific Method(124-144)	NM	MA.8.8.D.3.3	Conduct simple experiments and/or simulations, record results in charts, tables, or graphs, and use the results to draw conclusions and make predictions.
Scientific Method(124-144)	NM	MA.8.8.D.4.5	Use probability to generate convincing arguments, draw conclusions, and make decisions in a variety of situations.